PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants	: Peter Zatloukal et al.	Examiner	: Ali, Farhad
Application No.	: 10/531,162	Art Unit	: 2478
Filed	: April 12, 2005	Docket No.	: 120083-141790
For	: A MOBILE DIGITAL COMMUNICATION/COMPUTING DEVICE HAVING A CONTENT SENSITIVE AUDIO SYSTEM	Date	: March 3, 2011

Mail Stop Appeal Brief - Patents
Commissioner for Patents
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Reply to Examiner's Answer

Dear Sir or Madam:

This is a Reply to Examiner's Answer mailed January 6, 2011. Appellant relies on the arguments made in support of the allowability of all pending claims presented in the Appeal Brief filed October 4, 2010. However, Appellant replies to particular arguments of the Examiner's Answer (pg. 8-9, Examiner's Answer) as follows.

Claim 1 recites a method of operation [in a mobile client device] comprising:

first providing, by the mobile client device, a first audio signal at a first audio volume level to a user, the first audio volume level being selectable by the user;

determining by the mobile client device, the first audio volume level at which the first audio signal is being provided to the user by the mobile client device;

while providing said first audio signal to the user at the first audio volume level, **providing**, by the mobile client device, to the user **a second audio signal at a second audio volume level**, the second audio volume level being **variably controlled** by the mobile client

device **based on said first audio volume level**, **the second audio volume level being non-intrusively lower than the first audio volume level initially**; and

while providing the first and second audio signals, **incrementally increasing**, by the mobile client device, **the second audio volume level from the initial non-intrusive lower volume level** to a discernable volume level higher than the first audio volume level, **said incrementally increasing further comprising**:

first, increasing the second audio volume level by a first predetermined increment,

second, determining that the user has not responded to the second audio signal, and

third, increasing the second audio volume level by a second predetermined increment.

On page 8 of the Examiner's Answer, the Examiner cited several passages of Donaldson for teaching "determining that the user has not responded to the second audio signal . . ." The Examiner asserted that "the presence of a source constitutes a determination of the users response to the audio signal, as once a user responds to the signal it will become inactive . . . ." The Examiner cited two passages (col. 5, lines 50-54 and col. 6, lines 35-38) in support of these assertions. The text of the relevant paragraphs is reproduced below (emphasis ours):

> For each possible audio source pair in the handheld device, the prioritization rules establish the relative gain applied to the sources. the absolute levels may be set in relation to a fixed decibel level, or it may be referenced to the level or presence of one of the sources. **Alternatively**, **prioritization between a signal event and a continuous source** may be dependent upon the **presence** of a **continuous** source, **regardless of the immediate sound level**. For instance a .WAV file or .MP3 file that is being played. The prioritization rules establish a hierarchy of priority for the audio sources in the handheld device. The rules may be implemented in hardware or software, or both.
>
> (col. 5, lines 50-61)

> FIG. 3 shows a particular embodiment of the invention wherein audio source B is a signal event source that has a higher priority than a continuous audio source A. **At time T_o** Mixer input A has an arbitrary

> initial level A_I, and **audio source B is inactive** with Mixer input B having a value of zero. Mixer input A and Mixer input B are the signals derived from audio source A 200 and audio source B of FIG. 1, and have been processes by the variable attenuator/amplifiers in concert with the priority logic unit 202 . In this scenario, Input A could be derived from a continuous source such as a radio broadcast, and Input B could be derived from a signal event input such as a telephone ringer. At time T_1, audio source B **becomes active** and Mixer input B has a level of B_I. **In response to audio source B becoming active, the system causes Mixer input B to be reduced to an attenuated level A_A. A time T_2 audio source B becomes inactive and Mixer input A is restored to it previous level A_I.**
>
> (col. 6, lines 21-37)

Thus, in the first cited passage Donaldson discloses setting "absolute levels" in relation to a fixed decibel level, to the level of one of the sources, or to the presence of one of the sources. Donaldson also discloses, as an alternative, prioritizing between a signal event and a continuous source based on the *presence* of the continuous source, *regardless of the immediate sound level*. In the second passage Donaldson discloses that a continuous source (A) is provided at an initial level while a signal source (B) is inactive. When the signal source (B) becomes active, mixer input (A) is attenuated. When the signal source (B) becomes inactive, mixer input (A) is restored to its initial level.

Applicants find no teaching in these passages of "determining that the user has **not** responded to the second audio signal."

First, the Examiner asserts that "the presence of a source constitutes a determination of the user's response to the audio signal, as once a user responds to the signal it will become inactive . . . ." Applicants respectfully disagree. Even if the presence of a source could be fairly interpreted as teaching a determination of the user's response to an audio signal (Applicants do not concede this), such a determination would be, at most, a determination that the user **has** responded to the signal. In contrast, claim 1 clearly recites "second, determining that a user **has not** responded to the second audio signal."

In addition, claim 1 recites "**while providing** the first and second audio signals, **incrementally increasing** . . . the second audio volume level . . . **said incrementally increasing further comprising**: . . . second, determining that the user has **not** responded to the second audio signal . . . ." Thus, the "determining" is a feature of "incrementally increasing . . . the second audio volume level . . . ," *which occurs* "*while providing the first and second audio signals.*" Applicants note that even if Donaldson could be fairly interpreted as teaching a determination that a user **has** responded to the signal, such a determination would occur as a result of the signal (i.e., source) becoming *inactive*. It logically follows that such a determination could not occur while both signals are being provided. Therefore, Donaldson does not teach the above feature.

On page 9 of the Examiner's Answer, the Examiner cited col. 2, lines 52-62 of Donaldson for teaching the "incrementally increasing" recitation of claim 1, which comprises "first, increasing the second audio volume level by a first predetermined increment," "second, determining that the user has not responded to the second audio signal," and "third, increasing the second audio volume level by a second predetermined increment." The cited passage and the passage immediately following are reproduced below (emphasis ours):

> In one embodiment of the present invention, two audio sources A and B are sensed by a priority logic unit. Source A is a continuous audio source and source B is either a continuous audio source or a signal event audio source. The two sources are combined into a single output with each source having a predetermined level of attenuation or gain and thus a **predetermined signal level ratio**. Upon sensing an **increase in amplitude** of source B **above a preset threshold level**, the attenuation or gain of one or both sources is adjusted such that a new signal ratio is established between the two sources.
>
> For example, if source A is a high priority source (e.g. a telephone ring or other alert tone) and source B is a lower priority source (e.g. a music program) then the sound management system may lower the volume on source B, combine with source A and output the result. Alternatively, source A may be raised in volume, combined with source B, and then output. In one embodiment, the sound management system is integrated with a palm sized handheld computer system.
>
> (col. 2, line 52 to col. 3, line 4; abstract)

In particular, the Examiner asserted that "[e]stablishing a new signal ratio is not limited to a single occurrence as the amplitude may change multiple times, and as long as the 2 sources are still present (which constitutes the determining) the signal ratio will either be maintained or a new signal ratio will be established in response to the change of amplitude."

However, the cited passages merely disclose that a new signal ratio is established *upon sensing an increase in the amplitude of source B above a preset threshold.* Even if the amplitude of one of the signals changes, it does not necessarily follow that the amplitude exceeds a preset threshold, resulting in the establishment of a new signal ratio. Nor does Donaldson indicate more than one preset threshold for any pair of audio sources. In fact, the examples of Donaldson provide only one threshold (at most) for any given pair of audio sources. Donaldson discloses that where an alert source is the high priority source, the "threshold" is essentially zero, such that when the alert source becomes active a new signal ratio is established (Fig. 3 and accompanying description in col. 6, lines 22-59). Where an alert source is the low priority source, the level of the ring level is merely set at a level below that of the higher priority source (Fig. 4 and accompanying description in col. 6, lines 60-67). This example does not appear to involve a "preset threshold level." And where both sources are continuous sources, an arbitrary threshold is set for the higher priority source and the level of the lower priority source is reduced in response to the higher priority source exceeding the threshold (Fig. 5 and accompanying description in col. 7, lines 1-22).

Therefore, as also discussed on pages 9-11 of the Appeal Brief filed October 10, 2010, Donaldson does not disclose the "incrementally increasing" recitation of claim 1.

The Examiner does not explicitly assert that Donaldson *inherently* describes those recitations. However, the Examiner concluded that "the above teaching of a new signal ratio" [of col. 2, lines 52-62] "can be properly applied to both the first and the second predetermined increments, wherein the second predetermined increment occurs after the determining that the user has not responded to the second audio signal (since both audio signals are still present)." Applicants note that when relying upon the theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly

inherent characteristic necessarily flows from the teachings of the applied prior art. *See Ex parte Levy*, 17 USPQ2d 1461, 1464 (BPAI 1990). As indicated by the above-discussed examples, the recited "incrementally increasing . . . further comprising: first, increasing . . . , second, determining . . . , and third, increasing . . ." features do not necessarily flow from the methods disclosed by Donaldson. Again, "inherency . . . may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Hansgirg v. Kemmer*, 102 F.2d 212, 214 (CCPA 1939), quoted in *Continental Can Co. USA v. Monsanto Co.*, 948 F.2d 1264, 1269 (Fed. Cir. 1991). "[T]he [prior art] reference must clearly and unequivocally disclose the claimed [invention] or direct those skilled in the art to the [invention] without *any* need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference." *In re Arkley*, 455 F.2d 586, 587 (CCPA 1972).

Conclusion

For at least the reasons discussed in the Appeal Brief and above, the rejections are in error. Applicants respectfully request withdrawal of the rejections and allowance of the pending claims.

Respectfully submitted,
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I. CLAIMS APPENDIX

1. (Previously Presented) In a mobile client device, a method of operation comprising:

first providing, by the mobile client device, a first audio signal at a first audio volume level to a user, the first audio volume level being selectable by the user;

determining by the mobile client device, the first audio volume level at which the first audio signal is being provided to the user by the mobile client device;

while providing said first audio signal to the user at the first audio volume level, providing, by the mobile client device, to the user a second audio signal at a second audio volume level, the second audio volume level being variably controlled by the mobile client device based on said first audio volume level, the second audio volume level being non-intrusively lower than the first audio volume level initially; and

while providing the first and second audio signals, incrementally increasing, by the mobile client device, the second audio volume level from the initial non-intrusive lower volume level to a discernable volume level higher than the first audio volume level, said incrementally increasing further comprising:

first, increasing the second audio volume level by a first predetermined increment,

second, determining that the user has not responded to the second audio signal, and

third, increasing the second audio volume level by a second predetermined increment.

2. (Previously Presented) The method of claim 1, wherein said determining the first audio volume level comprises the mobile client device determining a first audio volume level at which the mobile client device is being utilized by a user for a first audio signal corresponding to music associated with output of at least one of an MP3 player and a radio included with the mobile client device.

3. (Previously Presented) The method of claim 1, wherein said second providing the second audio signal comprises the mobile client device providing the second audio signal corresponding to a ring tone associated alert for at least a selected one from the group consisting of an incoming

call, a received indication of a text message, a received indication of a voicemail message, a calendar alert, and a wireless mobile phone system utilities warning.

4. (Cancelled)

5. (Previously Presented) The method of claim 1, wherein said incrementally increasing comprises incrementally increasing the second audio volume level to a pre-determined audio volume level limit above which hearing damage is likely to occur.

6. (Previously Presented) The method of claim 1, wherein said incrementally increasing comprises incrementally increasing the second audio volume level by a selected one of a constant increment and an increasing increment.

7. (Previously Presented) The method of claim 1, wherein said determining comprises the mobile client device determining the first audio volume level measured as an audio power level.

8. (Previously Presented) The method of claim 7, wherein said determining the first audio volume level comprises the mobile client device determining the first audio volume level measured as at least one of volts, watts, and decibels.

9. (Previously Presented) The method of claim 1, further comprising the mobile client device mixing said first and second audio signals and providing the first and second audio signals as a mixed signal, the second audio volume level being variably controlled by the mobile client device based at least in part on said mixed signal.

10. (Previously Presented) A wireless mobile phone comprising:

a first audio resource, the first audio resource equipped to provide a first audio signal at a first audio volume level at which the mobile phone is being utilized by a user for the first audio signal, the first audio volume level being selectable by the user; and

a second audio resource, wherein the second audio resource is equipped to

determine the first audio volume level at which the first audio signal is being provided to the user by the first audio resource,

provide a second audio signal at a second audio volume level to the user while the mobile phone is being utilized by the user for the first audio signal at the first audio volume level, the second audio volume level being variably controlled by the second audio resource based on said first audio volume level, the second audio volume level being non-intrusively lower than the first audio volume level initially,

while the first and second audio signals are being provided, incrementally increase the second audio volume level from the initial non-intrusive volume level to a discernable volume level higher than the first audio volume level, the second audio resource equipped to incrementally increase the second audio volume level by

first, increasing the second audio volume level by a first predetermined increment,

second, determining that the user has not responded to the second audio signal, and

third, increasing the second audio volume level by a second predetermined increment, and

terminate the second audio signal preventing the second audio signal from intruding on the first audio signal in response to a user action.

11. (Previously Presented) The wireless mobile phone of claim 10, wherein the first audio resource comprises at least one of an MP3 player and a radio.

12. (Original) T he wireless mobile phone of claim 10, wherein the second audio resource comprises an audio resource equipped to receive a delivery of a message alert to the user.

13. (Previously Presented) The wireless mobile phone of claim 12, wherein the second audio resource comprises a ring tone generator.

14. (Previously Presented) The wireless mobile phone of claim 12, wherein the second audio resource is equipped to receive a delivery of a message alert for at least a selected one from the group consisting of an incoming call, a received indication of a text message, a received

indication of a voicemail message, a calendar alert, and a wireless mobile phone system utilities warning.

15. (Cancelled)

16. (Previously Presented) The wireless mobile phone of claim 10, wherein the second audio resource is equipped to incrementally increase the second audio volume level to a predetermined audio volume level limit above which hearing damage is likely to occur.

17. (Previously Presented) The wireless mobile phone of claim 10, wherein second audio resource is equipped to incrementally increase the second audio volume level by a selected one of a constant increment and an increasing increment.

18. (Previously Presented) The wireless mobile phone of claim 10, wherein the first and second audio volume levels are measured as audio power levels.

19. (Previously Presented) The wireless mobile phone of claim 18, wherein the audio power levels are measured in at least one of volts, watts, and decibels.

20. (Previously Presented) The wireless mobile phone of claim 10, further comprising a mixer, the mixer equipped to mix the first and second audio signals, the second audio resource being further equipped to variably control the second audio volume level based at least in part on the mixed signal.

21.-28. (Cancelled)

29. (Previously Presented) A mobile client device comprising:

a storage medium having stored therein a plurality of programming instructions, which when executed, the instructions cause the mobile client device to

first provide a primary audio signal at a first audio volume level to a user, the primary audio volume level being selectable by the user,

determine the primary audio volume level at which the primary audio signal is being provided to the user, and

while said primary audio signal is being provided to the user at the first audio volume level, provide a secondary audio signal at a second audio volume level to the user, the second audio volume level being variably controlled by the mobile client device based on said first audio volume level, the second audio volume level being non-intrusively lower than the first audio volume level initially, and

while the mobile client device provides the primary and secondary audio signals, incrementally increase the secondary audio volume level from the initial non-intrusive volume level to a discernable volume level higher than the first audio volume level by:

first, increasing the second audio volume level by a first predetermined increment,

second, determining that the user has not responded to the second audio signal, and

third, increasing the second audio volume level by a second predetermined increment; and

a processor coupled to the storage medium to execute the programming instructions.

30. (Previously Presented) The mobile client device of claim 29, wherein the primary audio signal corresponds to music associated with output of at least one of an MP3 player and a radio included with the mobile client device.

31. (Previously Presented) The mobile client device of claim 29, wherein the secondary audio signal corresponds to a ring tone associated alert for at least a selected one from the group consisting of an incoming call, a received indication of a text message, a received indication of a voicemail message, a calendar alert, and a wireless mobile phone system utilities warning, and the programming instructions are further configured to terminate the secondary audio signal preventing the secondary audio signal from intruding on the primary audio signal in response to an user action.

32. (Cancelled)

33. (Previously Presented) The mobile client device of claim 29, wherein the primary audio volume level is measured as an audio power level.

II. EVIDENCE APPENDIX

None.

III. RELATED PROCEEDINGS APPENDIX

None.